Application No. 10/554,192 Docket No.: 27793-00104USPX

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A pneumatic structural element comprising:

an elongated airtight hollow body adapted to be impinged upon by compressed air, the hollow body being made of a flexible material;

the hollow body comprising at least one compression rod which along a surface line of the hollow body rests against the hollow body and is secured against displacement and buckling;

the hollow body comprising at least one pair of traction elements attached to two ends of the compression rod, each end of the compression rod comprises a knot for mutual non-positive attachment of the compression rod and the at least one pair of traction elements and for taking up bearing forces;

the at least one pair of traction elements, in at least one turn are helically placed around the hollow body in opposite directions and are adapted to intersect on a surface line of the hollow body, wherein the surface line is opposite the compression rod; and

wherein means are provided by which at least one of the operating parameters of pressure in the hollow body, length of the compression rod, or length of the at least one pair of traction elements can be altered pneumatically, hydraulically, or mechanically.

- (Previously Presented) The pneumatic structural element according to claim 1, wherein means are provided by which the length of the compression rod can be altered pneumatically, hydraulically or mechanically.
- 3. (Previously Presented) The pneumatic structural element according to claim 2, wherein the length of the compression rod is altered by means of a linear actuator unit having two locking devices, which can be operated in turn, on both ends of a linear actuator to overcome multiples of a maximum regulating distance of the linear actuator.

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4. (Previously Presented) The pneumatic structural element according to claim 1, wherein means are provided by which the length of the at least one pair of traction elements can be altered pneumatically, hydraulically or mechanically.

- 5. (Previously Presented) The pneumatic structural element according to claim 4, wherein the length of the at least one pair of traction elements is varied by means of a linear actuator unit having two locking devices, which can be operated in turn, on both ends of a linear actuator to overcome multiples of a maximum regulating distance of the linear actuator.
- (Previously Presented) The pneumatic structural element according to claim 1, wherein means are provided by which compressed air can be supplied to, or removed from, the hollow body.
- 7. (Previously Presented) The pneumatic structural element according to claim 1, further comprising a plurality of sensors for measuring variable operating parameters of interior pressure in the hollow body, length or stress of the compression rod or length or stress of the at least one pair of traction elements.

8-10. (Canceled)

 (Previously Presented) The pneumatic structural element according to claim 1, further comprising an electronic control and regulating device for maintaining interior pressure in the hollow body.